Amendments to the Claims

Claim 1 **(Currently Amended)** A permanent magnet field small DC motor comprising:

a soft-magnetic frame; and

an arc-shaped permanent magnet fixed in said soft-magnetic frame,

wherein an outer surface of said arc-shaped permanent magnet has a pair of end portions and a middle portion therebetween ~~at ends of said arc-shaped permanent magnetic~~ in a thrust direction, said end portions fit along an inner surface of said soft-magnetic frame, and said middle portion has a pair of recessed sections that ~~regions of said outer surface of said arc-shaped permanent magnet at ends of said arc-shaped permanent magnet in a circumferential direction and between said outer surface at said ends in the thrust direction~~ are recessed on outer middle portion regions of said middle portion with respect to said ~~outer surface at said ends in the thrust direction~~ end portions.

Claim 2 **(Currently Amended)** The permanent magnet field small DC motor of claim 1, further comprising:

~~another arc-shaped permanent magnet, said arc-shaped permanent magnet and said another arc-shaped permanent magnet being~~ a pair of said arc-shaped permanent magnets; and

a pair of springs,

wherein said ~~pair of~~ arc-shaped permanent magnets are disposed opposing each other in said soft-magnetic frame with said end portions ~~outer surface at said ends in the thrust direction~~ fitting along said inner surface of said soft-magnetic frame, and said arc-shaped permanent magnets are fixed at ~~said~~ ends in a direction of curvature ~~in the circumferential direction~~ using said springs, respectively.

Claim 3 **(Previously Presented)** The permanent magnet field small DC motor of claim 2, wherein said arc-shaped permanent magnets comprise a compression molded material of rare earth iron based melt-spun flakes and a binder.

Claim 4 **(Previously Presented)** The permanent magnet field small DC motor of claim 2, wherein said arc-shaped magnets have a maximum thickness of 1 mm.

Claim 5 **(Currently Amended)** The permanent magnet field small DC motor of claim 1, wherein clearances are formed between said recessed sections ~~middle regions~~ of said arc-shaped permanent magnet and said soft-magnetic frame.

Claim 6 **(Currently Amended)** The permanent magnet field small DC motor of claim 3, wherein a curvature of said recessed sections ~~middle regions~~ of said arc-shaped permanent magnets is different from that of ~~said outer surface at~~ said end portions ~~ends of the arc-shaped permanent magnets in the thrust direction~~ so that said soft-magnetic frame does not function as a back yoke at said recessed sections ~~middle regions~~.

Claim 7 **(Currently Amended)** The permanent magnet field small DC motor of claim 1, further comprising ~~another arc-shaped permanent magnet, said arc-shaped permanent magnet and said another arc-shaped permanent magnet being~~ a pair of said arc-shaped permanent magnets fixed along said inner surface of said soft-magnetic frame opposing each other, wherein said arc-shaped permanent magnets exhibit different demagnetization curves at least by unsaturated magnetization.

Claim 8 **(Currently Amended)** The permanent magnet field small DC motor of claim 5, further comprising ~~another arc-shaped permanent magnet, said arc-shaped permanent magnet and said another arc-shaped permanent magnet being~~ a pair of said arc-shaped permanent magnets, wherein said arc-shaped permanent magnets oppose each other and are fixed along said inner surface of said soft-magnetic frame, and each of said arc-shaped permanent magnets has a ~~a~~ rate of demagnetization that increases along with a distance from a center of a magnetic pole towards ~~said~~ ends in a direction of curvature ~~the circumferential direction~~, whereby the rate of demagnetization is greatest between said recessed sections ~~middle regions~~ and said soft-magnetic frame.

Claim 9 **(Currently Amended)** An optical pickup device comprising:

a permanent magnet field small DC motor comprising a soft-magnetic frame; and

an arc-shaped permanent magnet fixed in said soft-magnetic frame,

wherein an outer surface of said arc-shaped permanent magnet has a pair of end portions and a middle portion therebetween ~~at ends of said arc-shaped permanent magnetic~~ in a thrust direction, said end portions fit along an inner surface of said soft-magnetic frame, and said middle portion has a pair of recessed sections that ~~regions of said outer surface of said arc-~~

~~shaped permanent magnet at ends of said arc-shaped permanent magnet in a circumferential direction and between said outer surface at said ends in the thrust direction~~ are recessed on outer middle portion regions of said middle portion with respect to said ~~outer surface at said ends in the thrust direction~~ end portions.

Claim 10 **(Currently Amended)** The permanent magnet field small DC motor of claim 1, wherein said recessed sections ~~middle regions~~ are planar.

Claim 11 **(Currently Amended)** The optical pickup device of claim 9, wherein said recessed sections ~~middle regions~~ are planar.